In a recent randomized phase 2 trial in patients with stage IV NSCLC, Imprime PGG in combination with carboplatin/paclitaxel demonstrated clinically meaningful antitumor activity, consistent with previous trials in chemotherapy-naive and chemotherapy-refractory settings. The primary endpoint, duration of response (DoR), was confirmed in an independent central radiology review. The median DoR for patients treated with Imprime PGG was 13.3 months compared to 5.4 months for the control group (95% CI 8.3-19.7 vs 4.2-9.7; P = 0.002). The median progression-free survival (PFS) was also significantly longer in the Imprime PGG group, at 11.4 months (95% CI 8.1-19.1) compared to 7.8 months in the control group (95% CI 6.5-13.0; P = 0.005). These results were observed across all baseline subgroups, including those with good and poor performance status.

Safety Results
The safety profile of Imprime PGG was generally consistent with that of the control group. The most common adverse events were nausea, vomiting, and anemia. There was an increased risk of severe adverse events in the Imprime PGG group, but these were mainly grade 3 or lower. There were no drug-related deaths in either group. The incidence of severe adverse events was higher in the Imprime PGG group, with no clear preponderance of specific adverse events.

Conclusions
The results of this trial provide evidence for the efficacy and safety of Imprime PGG in combination with carboplatin/paclitaxel for the first-line treatment of stage IV non-squamous NSCLC. The improvements in duration of response and progression-free survival demonstrate the potential for this regimen to improve clinical outcomes for patients with NSCLC.